

Application No. 09/256,845

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REMARKS

Claims 1-45 were considered by the Examiner. Independent claims 1 and 26 have been cancelled and new independent claims 46 and 60 have been submitted. These independent claims are presented below, in light of the current state of the prior art, specifically Krishna et al. (U.S. 6,055,522 - filed 06/1997) in view of Kiyono et al. (U.S. 6,137,483 - filed 11/1996).

Independent Claim 46, as Patentable Over Krishna et al. in view of Kiyono

The Examiner twice rejected independent claims 1 and 26 under 35 U.S.C. § 103(a) over Krishna et al. in view of Kiyono. The Examiner conceded that:

“Krishna does not explicitly teach registering the references of the at least one template with a dictionary.”

“Krishna does not explicitly teach a template manager, responsive to requests from a client computer, for parsing at least one template for determining particular run-time services to be invoked for a given client.”

The Examiner looked for the missing features of the present invention in Kiyono.

Independent claim 46 is set out below, for ready reference:

46. A method of creating and deploying an application that provides access to back-end information access functionality, including:

creating at least one template including one or more abstract references that specify functionality to be invoked when a given client requests the template;

registering the abstract references with a dictionary that associates the abstract references with at least one run-time handler and one or more run-time services; and

providing the specified functionality to access information, including:

receiving a request from the given client that identifies at least one template;

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accessing the identified template and determining the abstract references in the identified template;

accessing the dictionary and determining the run-time handler and the run-time services associated with the abstract references; and

invoking the run-time handler and the run time services to access to the back-end information access functionality.

This claim is broader in some respects that the prior independent method claim 1. For instance, less emphasis is placed on a particular client. Claim 46 now emphasizes the abstraction provided by the present invention, which overcomes a problem that neither Krishna et al. nor Kiyono acknowledges. That is, the present invention solves a problem not considered by the references that the Examiner has cited.

The present application explains that one of the problems in development of systems that respond to client requests is maintaining multiple versions of code, both for information access and for presentation. Figure 1B illustrates this problem. Neither Krishna et al. nor Kiyono acknowledges or tries to solve this problem. Both of the cited references address dynamic content of HTML pages without addressing code versioning.

In claim 46, the limitations of references and functionality have been more clearly defined, to avoid confusion that apparently arose from claim 1. References registered in a dictionary, mentioned in the now-cancelled claim 1, were interpreted by the Examiner very broadly, to correspond to background discussion in Krishna et al.:

Krishna discloses the dictionary to determine which specific functionality should be invoked (providing instructions for obtaining and formatting objects which will invoke a set of actions when object is displayed for viewing; col. 1, lines 21-32 and col. 2, lines 1-8).

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FOA, page 3, section "C". In the cited columns and lines, Krishna et al. does not mention a dictionary or a layer of abstraction. At col. 1, lines 21-32, Krishna et al. describes a web page as a repository for multi-media objects or pointers to other servers where multi-media objects can be accessed. There is no sense of a dictionary in col. 1, lines 21-32. At col. 2, lines 1-8, Krishna et al. explains that a web page may provide "instructions for obtaining and formatting objects to be displayed in each region [of a web page], and prescribing a set of actions by which the objects interact with one another." Based on critical reading of the passages cited by the Examiner, Applicants do not believe that references registered in a dictionary, as mentioned in the prior claim 1, were found in Krishna et al.

Consistent with the sense of claim 1 but somewhat clarified, claim 46 refers to "abstract references" instead of unqualified "references". This does not introduce new subject matter, as abstract and abstraction are terms and concepts repeatedly used in the originally filed application. The sense of an abstract reference is something that is resolved by consulting a dictionary. A dictionary, in this sense, may be built into a parser or may be externally maintained. The most basic functionality is likely to be abstracted in a parser, for performance reasons. An "abstract reference" does not stand on its own, in contrast to a URL. As the Examiner correctly pointed out on page 3, at the bottom, Krishna et al. uses URLs contained in a template file to obtain content (by actions such as get and put) from a server. While references resolved by use of a dictionary plainly should distinguish over Krishna et al., there can be no doubt that "abstract references" resolved by use of a dictionary are not found in Krishna et al.

Use of "abstract references" in claim 46 also distinguishes over Kiyono. The Examiner asserts that "Kiyono teaches registering the references of the at least one template (the logic structure in the template is synthesized with the selected material information by the logic structure synthesizing means; col. 7, lines 37-56)." At column 7, in the cited passage, Kiyono does not mention a dictionary and does not refer to registering references with any dictionary-like data structure, for future use in parsing a template. "Synthesizing means" are not explained by Kiyono as including a dictionary. As the Examiner points out, "synthesizing means" provide a merge function for using "logic structure in the template" to format "selected material information", only after the

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information is in hand, has been selected. This is not the same thing as “a dictionary that associates the abstract references with at least one run-time handler and one or more run-time services”. While references resolved by use of a dictionary plainly should distinguish over Kiyono, there can be no doubt that “abstract references” resolved by use of a dictionary are not found in Kiyono.

Independent Claim 60, as Patentable Over Krishna et al. in view of Kiyono

Independent claim 60 describes a device:

60. A template repository and template manager system that provide access to a back-end information access functionality in response to a client request for a template, including:

a template repository that stores templates, a particular template including one or more abstract references that specify back-end information access functionality to be invoked when the client requests the particular template;

a dictionary that associates the abstract references with one or more run-time services; and

a template manager, responsive to the client request that identifies the particular template, including logic that

accesses the template repository and parses the particular template,

accesses the dictionary and resolves the abstract references to the associated run-time services, and

invokes the associated run-time services that provide back-end information access functionality.

Unlike the prior claim 26, this device claim includes reference to a dictionary. A dictionary, in this sense, may be built into a parser or may be externally maintained. The most basic functionality is likely to be abstracted in a parser, for performance reasons. For the reasons stated

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above, there can be no doubt that "abstract references" resolved by use of a dictionary are not found in Krishna et al. or Kiyono.

Dependent Claims

Applicants respectfully submit that the dependent claims should be patentable for at least the same reasons as the independent claims.

CONCLUSION

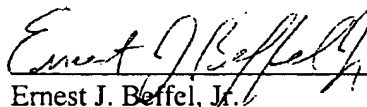
New counsel for Applicants (and for a new assignee) welcome the opportunity to discuss this case with the Examiner, in the interest of expediting issuance. If the Examiner does not agree that the new claims are in condition for allowance over the cited references, Applicants would most appreciate an opportunity to discuss the claims with the Examiner.

The undersigned normally can be reached between 8:30 a.m. and 5:30 p.m., excepting lunch, at the numbers listed below.

Thank you for consideration of these new claims.

Respectfully submitted,

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Ernest J. Beffel, Jr.
Reg. No. 43,489

CUSTOMER NO. 22470

Haynes Beffel & Wolfeld LLP
P.O. Box 366
Half Moon Bay, CA 94019
(650) 712-0340 phone
(650) 712-0263 fax